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EXAMINER

BRANDT, CHRISTOPHER M

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/500,874  
Filing Date: July 07, 2004  
Appellant(s): HAUMONT, SERGE

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Keith M. Mullervy  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed December 15, 2009 appealing from the Office action mailed May 18, 2009.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

US PGPUB 2002/0128028 A1	STILLE ET AL.	9-2002
US PATENT 6,148,198	ANDERSON ET AL.	11-2000

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1, 2, and 4-29** are rejected under 35 USC 103(a) as being unpatentable over **Stille et al. (US PG PUB 2002/0128028 A1, hereinafter Stille)** in view of **Anderson et al. (US Patent 6,148,198, hereinafter Anderson)**.

Consider **claim 1 (and similarly applied to claims 5, 15, 16, 19-22, and 27-29)**. Stille discloses a method, comprising:

maintaining partner information about predefined partner networks, the partner information indicating that network operators share a serving network node (figure 2, paragraphs 6-8, 21, read as route outgoing packets through the correct home network. In order for this to

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occur the information about the partner must be maintained. In addition, using information the shared radio network is utilized for determining which one of the shared radio network owners the visiting MT is going to be connected to (paragraph 12)), and

selecting, in the network apparatus, a gateway network node for a mobile station served by the serving network node on the basis of the partner information (paragraph 11, read as routing outgoing packets through the correct home network. In addition, the SGSN 9 then uses the DNS 22 to find out which GGSN:s 16, 17, 18, 19 that may be used, and switches the MT:s 2, 3 to the correct GGSN:s, 16, 17, 18, 19, establishing PDP contexts (paragraph 30)),

wherein the selecting of the gateway network node for the mobile station on the basis of the partner information comprises specifying a mobile station is not visiting; and informing the gateway network node that the mobile station may use the network (paragraphs 27, 28, and 30, read as that the IMSI provides information that specifies that the MT2 is not visiting (i.e. in a predefined partner network), and the SGSN then has accessed information about which operator the MT2 is subscribed to and which home network the MT2 shall use. Stille further discloses that if, however, an MT4 that is subscribed to an operator that is not one of the owners of the shared network (i.e. in a network outside them), the SGSN contacts a HLR of that MTs home network and uses the IMSI to find out that the MT4 is a visiting MT. It is further noted that in a conventional cellular network, one of the first procedures taken is determining the identity of the mobile station in order to properly provide service. Therefore, if it is determined that the mobile station is in its home network, the conventional cellular network proceeds as normal. Moreover, Stille teaches that two of the MTs: 2, 3 are subscribed to operator A and operator B, respectively.

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The HLR:s 10, 11 are contacted and inform the SGSN 9 that the subscribers may use the APS:s 12, 13 that are chosen).

Stille substantially discloses the claimed invention but fails to explicitly teach checking on the basis of the partner information whether a mobile station is in a predefined partner network of a home network; and selecting the gateway network node of the home network if the mobile station is in a predefined partner network of the home network.

However, Anderson teaches checking on the basis of the partner information whether a mobile station is in a predefined partner network of a home network; and selecting the gateway network node of the home network if the mobile station is in a predefined partner network of the home network (column 3 lines 40-43, 53-65, read as classifying service providers such as home service provider, partner service provider etc. and then selects the best service provider).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Anderson into the invention of Stille in order to provide an intelligent roaming method and system for enabling a mobile station to select a best provider from a plurality of service providers (column 2 lines 11-13).

Consider **claim 2 and as applied to claim 1**. Stille discloses wherein the partner information comprises direct or indirect indications of the network in which the mobile station is located, and of the home network of the mobile station (paragraph 28).

Consider **claim 4 and as applied to claim 1**. Stille discloses wherein the selecting a gateway network node for the mobile station on the basis of the partner information comprises checking on the basis of the partner information whether the mobile station is in a network that is a predefined partner network of the one belonging to its home network operator; and selecting

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the gateway network node of a visited network if the mobile station is in a network that is a predefined partner network of the one belonging to its home network operator (paragraphs 28, 30).

Consider **claim 6 and as applied to claim 5**. Stille discloses wherein the partner information is maintained in the serving network node to indicate the networks sharing the serving network node (paragraphs 21, 22).

Consider **claim 7 and as applied to claim 6**. Stille discloses wherein the serving network node is configured to compare the mobile network code/mobile country code of the mobile station, in connection with the context activation of the mobile station, with access point name operator identifiers stored for each network operator sharing the serving network node, said mobile network code/mobile country code indicating explicitly the home network of the mobile station and said access point name operator identifier indicating implicitly the partner information (paragraph 21).

Consider **claim 8 and as applied to claim 5**. Stille discloses wherein the serving network node is also configured to connect a mobile station located in a mobile network that is a predefined partner network of its home network to the gateway network node of the home network (paragraphs 27, 28).

Consider **claim 9 and as applied to claim 5**. Stille discloses wherein the partner information is maintained in a subscriber register (paragraph 21).

Consider **claim 10 and as applied to claim 9**. Stille discloses wherein the subscriber register is configured to check the partner information in connection with the location update of

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the mobile station; set the value of a "Visitor-PLMN address allowed"-flag to `No` if the mobile station is in a predefined partner network of the home network; and indicate the value of the flag to the serving network node (paragraphs 21-27).

Consider **claim 11 and as applied to claim 5**. Stille discloses wherein the serving network node is also configured to connect the mobile station located in a predefined partner network of its home network to the gateway network node of the home network (paragraph 28).

Consider **claim 12 and as applied to claim 5**. Stille discloses wherein the subscriber register is configured to check the partner information in connection with the location update of the mobile station, the partner information comprising at least one network belonging to the home network operator; set value of the "Visitor-PLMN address allowed"-flag to `Yes` if the mobile station is located in a network that is a predefined partner network of the one belonging to its home network operator; and indicate the value of the flag to the serving network node (paragraphs 21-27).

Consider **claim 13 and as applied to claim 5**. Stille discloses wherein the serving network node is also configured to connect the mobile station located in a predefined partner network of the one belonging to its home network operator to the gateway network node of the visited network on the basis of the partner information, the partner information comprising at least one network belonging to the home network operator (paragraph 28).

Consider **claim 14 and as applied to claim 9**. Stille discloses wherein the subscriber register is configured to compare the mobile network code/mobile country code of the mobile station with access point name operator identifiers stored for each network operator sharing the



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network in connection with the location update of the mobile station; and indicate the result of the comparison to the serving network node (paragraph 21).

Consider **claim 17 and as applied to claim 16**. Stille discloses a third routine configured to maintain partner information (paragraphs 28, 30).

Consider **claim 18 and as applied to claim 16**. Stille discloses wherein the apparatus is a serving general packet radio service support node of a general packet radio service network (paragraphs 21, 27).

Consider **claims 23-26 and as applied to claims 1, 5, 15, and 16, respectively**. Stille and Anderson discloses wherein the selecting of the gateway network node for the mobile station on the basis of the partner information comprises checking on the basis of the partner information whether the mobile station is in the home network, in a predefined partner network of the home network, or in a network outside them; selecting the gateway network node of the home network if the mobile station is in its home network; and selecting the gateway network node of a visited network if the mobile station is outside its home network or predefined partner mobile networks of its home network (Anderson; column 3 lines 53-65).

#### **(10) Response to Argument**

##### **i) Claim 1**

With regard to appellant's argument that Stille and Anderson, whether considered individually or in combination, fail to disclose, teach, or suggest, "selecting, in the network apparatus, the gateway network node of the home network if the mobile station is in a predefined partner network of the home network," as recited in claim 1, the examiner respectfully disagrees.

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As indicated in the previous communication Anderson teaches classifying service providers such as home service provider, partner service provider and then selects the best service provider (column 3 lines 40-43, 53-65). The examiner notes that if a selection is made using the best service provider, a node has to be selected in order to provide the mobile station with service. Furthermore, in a previous communication, the examiner indicated that Stille teaches this feature/condition in paragraph 30 when Stille teaches that two of the MTs: 2, 3 are subscribed to operator A and operator B, respectively. The HLR:s 10, 11 are contacted and inform the SGSN 9 that the subscribers may use the APS:s 12, 13 that are chosen. Therefore, Stille discloses the limitation, "selecting the gateway network node of the home network if the mobile station is in a predefined partner network of the home network." However, as the examiner previously indicated, Anderson was relied upon to further clarify this particular feature in order to advance prosecution. Therefore, the combination of Stille and Anderson does disclose "selecting, in the network apparatus, the gateway network node of the home network if the mobile station is in a predefined partner network of the home network."

Appellants also note that Anderson merely describes selecting an access point (such as a base station) of a network (such as a partner network) for accessing a radio access network, where multiple radio access networks are at least partly overlapping. The examiner agrees with the analysis. However, one of ordinary skill in the art recognizes that the selection of an access point is the selection of a network node as the network node controls an access point or base station.

The examiner further notes that Stille teaching the aforementioned limitation does not clearly contradict the Final Office Action's admission that Stille fails to disclose or suggest the

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aforementioned limitation. As the examiner indicated in the Non-Final Office Action mailed on November 20, 2008, "Although the examiner respectfully disagrees with appellant's arguments as stated in the Advisory Action mailed on June 18, 2008, the examiner nonetheless provided appellant with a new ground of rejection in order to further advance prosecution." In addition, the examiner indicated that Stille did not "explicitly" teach this argued feature. However, after reading Stille's disclosure, one of ordinary skill in the art clearly observes that Stille reads upon the claimed invention as indicated above.

With regard to appellant's argument that it would not have been obvious to combine the cited references of Stille and Anderson because an embodiment of the present invention provides advantages that are not found in either Stille or Anderson, the examiner respectfully disagrees. First of all, Anderson and Still are both concerned with selecting / locking on to a preferred network (Stille; paragraph 11, Anderson; column 5 lines 55-67) and show and disclose the claims as currently written. Second of all, appellants are concerned with an embodiment of the present invention that is not even claimed. Specifically, appellants argue that "an advantage of an embodiment of the present invention over Stille is that in the embodiment of the present invention, the visited SGSN and the visited GGSN are in the same PLMN, whereas the solution by Still is only applicable to situations where the visited SGSN and the visited GGSN are in different PLMNs, thus requiring the establishing of a new separate shared network comprising a shared SGSN." This may be true, however, this is not recited in the current claims. The examiner further notes that appellants are referring to Stille's background (paragraphs 6-8) in comparing an embodiment of the present application with the problem Stille is trying to solve. Appellants continue arguing that "an advantage of an embodiment of the present invention

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over Anderson, is that the embodiment of the present invention is also applicable to situations where the home network and the partner network are such a distance that they are no overlapping, whereas the solution by Anderson is only applicable to situations where the networks are at least partly overlapping.” Once again, the recited claims do not limit the network from overlapping or not overlapping. Accordingly, Stille and Anderson are both applicable and read upon the recited claims. The examiner further notes that Stille and Anderson are both directed to selecting/connecting to shared/partner networks and one of ordinary skill in the art is aware that these networks may overlap partially or not at all. Regardless, Stille and Anderson are combinable and one of ordinary skill in the art would be motivated to combine the two references in order to provide Stille with an intelligent roaming method and system for enabling a mobile station to select a best service provider from a plurality of service providers. Enabling Stille with an intelligent roaming method and system enables the mobile station with better quality since the mobile station selects the best service provider using received signal strength indicators in conjunction with the service provider classification.

ii) Claim 2

With regard to appellant’s argument with respect to claim 2, which is dependent on claim 1, the examiner respectfully disagrees because Stille and Anderson disclose the argued limitations as provided above.

iii) Claim 4

With regard to appellant’s argument with respect to claim 4, which is dependent on claim 1, the examiner respectfully disagrees because Stille and Anderson disclose the argued limitations as provided above.

iv) Claim 5

With regard to appellant's argument with respect to claim 5, which recites, "selecting, in the network apparatus, the gateway network node of the home network if the mobile station is in a predefined partner network of the home network," as recited in claim 1, the examiner respectfully disagrees. The examiner's argument for this limitation can be found in Section (10), i.

v) Claim 6

With regard to appellant's argument with respect to claim 6, which is dependent on claim 5, the examiner respectfully disagrees because Stille and Anderson disclose the argued limitations as provided above.

vi) Claim 7

With regard to appellant's argument with respect to claim 7, which is dependent on claim 5, the examiner respectfully disagrees because Stille and Anderson disclose the argued limitations as provided above.

vii) Claim 8

With regard to appellant's argument with respect to claim 8, which is dependent on claim 5, the examiner respectfully disagrees because Stille and Anderson disclose the argued limitations as provided above.

viii) Claim 9

With regard to appellant's argument with respect to claim 9, which is dependent on claim 5, the examiner respectfully disagrees because Stille and Anderson disclose the argued limitations as provided above.

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ix) Claim 10

With regard to appellant's argument with respect to claim 10, which is dependent on claim 5, the examiner respectfully disagrees because Stille and Anderson disclose the argued limitations as provided above.

x) Claim 11

With regard to appellant's argument with respect to claim 11, which is dependent on claim 5, the examiner respectfully disagrees because Stille and Anderson disclose the argued limitations as provided above.

xi) Claim 12

With regard to appellant's argument with respect to claim 12, which is dependent on claim 5, the examiner respectfully disagrees because Stille and Anderson disclose the argued limitations as provided above.

xii) Claim 13

With regard to appellant's argument with respect to claim 13, which is dependent on claim 5, the examiner respectfully disagrees because Stille and Anderson disclose the argued limitations as provided above.

xiii) Claim 14

With regard to appellant's argument with respect to claim 14, which is dependent on claim 5, the examiner respectfully disagrees because Stille and Anderson disclose the argued limitations as provided above.

xiv) Claim 15

With regard to appellant's argument with respect to claim 15, which recites, "selecting, in the network apparatus, the gateway network node of the home network if the mobile station is in a predefined partner network of the home network," as recited in claim 1, the examiner respectfully disagrees. The examiner's argument for this limitation can be found in Section (10), i.

xv) Claim 16

With regard to appellant's argument with respect to claim 16, which recites, "selecting, in the network apparatus, the gateway network node of the home network if the mobile station is in a predefined partner network of the home network," as recited in claim 1, the examiner respectfully disagrees. The examiner's argument for this limitation can be found in Section (10), i.

xvi) Claim 17

With regard to appellant's argument with respect to claim 17, which is dependent on claim 16, the examiner respectfully disagrees because Stille and Anderson disclose the argued limitations as provided above.

xvii) Claim 18

With regard to appellant's argument with respect to claim 18, which is dependent on claim 16, the examiner respectfully disagrees because Stille and Anderson disclose the argued limitations as provided above.

xviii) Claim 19

With regard to appellant's argument with respect to claim 19, which recites, "selecting, in the network apparatus, the gateway network node of the home network if the mobile station is in

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a predefined partner network of the home network,” as recited in claim 1, the examiner respectfully disagrees. The examiner’s argument for this limitation can be found in Section (10), i.

xix) Claim 20

With regard to appellant’s argument with respect to claim 20, which recites, “selecting, in the network apparatus, the gateway network node of the home network if the mobile station is in a predefined partner network of the home network,” as recited in claim 1, the examiner respectfully disagrees. The examiner’s argument for this limitation can be found in Section (10), i.

xx) Claim 21

With regard to appellant’s argument with respect to claim 21, which recites, “selecting, in the network apparatus, the gateway network node of the home network if the mobile station is in a predefined partner network of the home network,” as recited in claim 1, the examiner respectfully disagrees. The examiner’s argument for this limitation can be found in Section (10), i.

xxi) Claim 22

With regard to appellant’s argument with respect to claim 22, which recites, “selecting, in the network apparatus, the gateway network node of the home network if the mobile station is in a predefined partner network of the home network,” as recited in claim 1, the examiner respectfully disagrees. The examiner’s argument for this limitation can be found in Section (10), i.

xxii) Claim 23



With regard to appellant's argument with respect to claim 23, which is dependent on claim 1, the examiner respectfully disagrees because Stille and Anderson disclose the argued limitations as provided above.

xxiii) Claim 24

With regard to appellant's argument with respect to claim 24, which is dependent on claim 5, the examiner respectfully disagrees because Stille and Anderson disclose the argued limitations as provided above.

xiv) Claim 25

With regard to appellant's argument with respect to claim 25, which is dependent on claim 15, the examiner respectfully disagrees because Stille and Anderson disclose the argued limitations as provided above.

xv) Claim 26

With regard to appellant's argument with respect to claim 26, which is dependent on claim 15, the examiner respectfully disagrees because Stille and Anderson disclose the argued limitations as provided above.

xvi) Claim 27

With regard to appellant's argument with respect to claim 27, which recites, "selecting, in the network apparatus, the gateway network node of the home network if the mobile station is in a predefined partner network of the home network," as recited in claim 1, the examiner respectfully disagrees. The examiner's argument for this limitation can be found in Section (10), i.

xvii) Claim 28

With regard to appellant's argument with respect to claim 28, which recites, "selecting, in the network apparatus, the gateway network node of the home network if the mobile station is in a predefined partner network of the home network," as recited in claim 1, the examiner respectfully disagrees. The examiner's argument for this limitation can be found in Section (10), i.

xviii) Claim 29

With regard to appellant's argument with respect to claim 29, which recites, "selecting, in the network apparatus, the gateway network node of the home network if the mobile station is in a predefined partner network of the home network," as recited in claim 1, the examiner respectfully disagrees. The examiner's argument for this limitation can be found in Section (10), i.

As a result, the claims are written such that they read upon the cited references.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Christopher M Brandt/

Examiner, Art Unit 2617

March 10, 2010

Conferees:

/George Eng/  
Supervisory Patent Examiner, Art Unit 2617

/Kent Chang/  
Supervisory Patent Examiner, Art Unit 2617